Day- 1

Java programming

Course code – csa0998

Name : P . Ajay sai

Reg . no : 192111453

1 . Print welcome

Code :-

```
class welcome
 {
    public static void main(String[] args) {
        System.out.println("welcome");
    }
}
```

Output:- welcome

2 . Sum of two numbers

Code:-

```
class SumOfNumber
{
public static void main(String args[])
{
int a = 22, b = 11, c;
c = a + b;
System.out.println("The sum of numbers is: "+c);
}
}
```

Output:- The sum of numbers is: 33

3 . Simple interest

Code:-

```
public class Main
 {
   public static void main (String args[])
    {   float p, r,  t,  si;
            p = 13000;  r = 12; t = 2;
```

```
            si  = (p*r*t)/100;
            System.out.println("Simple Interest is: "
+si);
   }}
```

Output:-

Simple intrest :-3120.0

4.Changing Claudius to Fahrenheit.

Code:-

```
import java.util.*;

public class Main{

   public static void main(String[] args){

      Scanner sc = new Scanner(System.in);
      System.out.println("Enter the temperature in
Celsius : ");
      float c = sc.nextFloat();
      float f = c * (9.0f/5.0f) + 32;

      System.out.println("The temperature is "+f+"
degree Fahrenheit.");
```

```
    }

}
```

Output:-
Enter the temperature in Celsius :
44
The temperature is 111.2 degree Fahrenheit.

5 . finding given number is odd or even.

Code:-

```
import java.util.Scanner;

public class EvenOdd {

   public static void main(String[] args) {

      Scanner reader = new Scanner(System.in);

      System.out.print("Enter a number: ");
      int num = reader.nextInt();

      if(num % 2 == 0)
         System.out.println(num + " is even");
      else
         System.out.println(num + " is odd");
   }
}
```

Output:- Enter a number: 5
5 is odd

6 . Leaf Year

Code:-

```
import java.util.Scanner;
class Leapyear
{
        public static void main(String arg[])
        {
           long a,y,c;
                   Scanner sc=new Scanner(System.in);
           System.out.print("enter  any  calendar year
:");
                y=sc.nextLong();
           if(y!=0)
           {

        a=(y%400==0)?(c=1):((y%100==0)?(c=0):((y%
4==0)?(c=1):(c=0)));
                if(a==1)
                   System.out.println(y+"    is    a    leap
year");
                else
```

```
                System.out.println(y+" is not a leap
year");
          }
          else
              System.out.println("year zero does not
exist ");
       }
}
```

Output:- enter any calendar year :2022
2022 is not a leap year

7 . Eligibility for voting
Code:-

```
import java.util.Scanner;

public class Voting {
 public static void main(String[] args)
 {
   int age, diff;
   Scanner scan = new Scanner(System.in);
   System.out.println("Please enter your age: ");
   age = scan.nextInt();
   if(age>=18)
   {
```

```
        System.out.println("You are eligible for voting.");
    }
    else
    {
    diff = (18 - age);
    System.out.println("Sorry,You can vote after: "+ diff + " years");
    }
 }
}
```

Output:- Please enter your age: 20
You are eligible for voting.

8 . Finding given number is positive or negative or zero.

Code:-

```
import java.util.Scanner;
public class CheckPositiveOrNegativeExample2
{
public static void main(String[] args)
{
int num;
Scanner sc = new Scanner(System.in);
System.out.print("Enter a number: ");
num = sc.nextInt();
```

```
if(num>0)
{
System.out.println("The number is positive.");
}
else if(num<0)
{
System.out.println("The number is negative.");
}
else
{
System.out.println("The number is zero.");
}
}
}
```

Output:- Enter a number: 55
The number is positive.

10 . Sum of service

Code :-

```
import java.util.Scanner;
public class SumOfNaturalNumber3
{
public static void main(String[] args)
{
int num, i, sum = 0;
```

```
Scanner sc = new Scanner(System.in);
System.out.print("Sum from: ");
i = sc.nextInt();
System.out.print("Sum up to: ");
num = sc.nextInt();
while(i <= num)
{
sum = sum + i;
i++;
}
System.out.println("Sum of Natural Numbers = " +
sum);
}
}
```

Output:-

```
Sum from: 1
Sum up to: 20
Sum of Natural Numbers = 210
```

11 . Fibonacci numbers

Code:-

```
class Main {
  public static void main(String[] args) {

    int n = 10, firstTerm = 0, secondTerm = 1;
```

```
    System.out.println("Fibonacci Series till " + n + "
terms:");

    for (int i = 1; i <= n; ++i) {
      System.out.print(firstTerm + ", ");
      int nextTerm = firstTerm + secondTerm;
      firstTerm = secondTerm;
      secondTerm = nextTerm;
    }
  }
}
```

Output:-

```
Fibonacci Series till 10 terms:
0, 1, 1, 2, 3, 5, 8, 13, 21, 34,
```

12 . Prime number or not.

Code:-

```
public class PrimeExample{
 public static void main(String args[]){
  int i,m=0,flag=0;
  int n=3;
  m=n/2;
  if(n==0||n==1){
   System.out.println(n+" is not prime number");
  }else{
```

```
   for(i=2;i<=m;i++){
    if(n%i==0){
     System.out.println(n+" is not prime number");
     flag=1;
     break;
    }
   }
   if(flag==0)    {  System.out.println(n+"  is  prime
number"); }
  }
}
}
```

Output:- 3 is prime number

13 . Armstrong number .

Code:-

```
import java.util.Scanner;
import java.lang.Math;
public class ArmstsrongNumberExample2
{
static boolean isArmstrong(int n)
{
int temp, digits=0, last=0, sum=0;
temp=n;
while(temp>0)
```

```
{
temp = temp/10;
digits++;
}
temp = n;
while(temp>0)
{
last = temp % 10;
sum +=  (Math.pow(last, digits));
temp = temp/10;
}
if(n==sum)
return true;
else return false;
}
public static void  main(String args[])
{
int num;
Scanner sc= new Scanner(System.in);
System.out.print("Enter the number: ");
//reads the limit from the user
num=sc.nextInt();
if(isArmstrong(num))
{
System.out.print("Armstrong ");
}
```

```
else
{
System.out.print("Not Armstrong ");
}
}
}
```

Output:-

```
Enter the number: 153
Armstrong
```

14 . Reverse the number .

Code:-

```
import java.util.Scanner;
public class ReverseNumberExample3
{
public static void reverseNumber(int number)
{
if (number < 10)
{
System.out.println(number);
return;
}
else
{
System.out.print(number % 10);
```

```
reverseNumber(number/10);
}
}
public static void main(String args[])
{
System.out.print("Enter the number that you want to reverse: ");
Scanner sc = new Scanner(System.in);
int num = sc.nextInt();
System.out.print("The reverse of the given number is: ");
reverseNumber(num);
}
}
```

Output:- Enter the number that you want to reverse: 4569
The reverse of the given number is: 9654

15 . Palindrome number or not .

Code:-

```
import java.util.*;
public class Main
{
  public static void main(String[] args)
```

```
  {
     Scanner sc = new Scanner(System.in);
     System.out.println("Enter the number: ");
     int num=sc.nextInt();
     int r,sum=0;
     int temp=num;
     while(num>0)
     {
     r=num%10;
     sum=(sum*10)+r;
     num=num/10;
     }
      if(temp==sum)
      System.out.println("The entered number "+temp+" is a palindrome number ");
      else
      System.out.println("The entered number "+temp+" is not a palindrome");
  }
}
```

Output:-

Enter the number: 12321

The entered number 12321 is a palindrome number.